

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) Pressure sensor with an integrated structure comprising:

a silicon die, having an upper edge, an inner face, and an outer face on which piezoresistors are mounted,

a support having an upper surface, and a recessed seat ~~suitable for containing~~ adapted to receive the die,

a container ~~suitable for implementation in such a way as to put~~ supporting the die in contact with ~~the~~ a fluid the pressure of which ~~has~~ is to be measured,

wherein said die is ~~integrated in said seat, made in the thickness of~~ mounted within the recessed seat in the support.

2. (Currently Amended) Pressure sensor with integrated structure according to claim 1 wherein the support further comprises a lower surface, and the recessed seat passes through the support from the upper surface to the lower surface.

3. (Currently Amended) Pressure sensor with integrated structure according to claim 1, further comprising ~~wherein~~ a step is ~~made~~ on the inner surface of the container, the step enabling improved gluing of the support.

4. (Currently Amended) Pressure sensor with integrated structure according to claim 1:

wherein the upper edge of the die is substantially ~~on the same plane as~~ coplanar with the upper surface of the support.

5. (Currently Amended) Pressure sensor with integrated structure according to claim 1:

wherein the inner face of the die is in contact with the fluid the pressure of which ~~has~~ is to be measured.

6. (Currently Amended) Pressure sensor with integrated structure according to claim 1:

wherein on the inner face of the die, in contact with the fluid the pressure of which is to be measured, is a layer of protection made from at least one of chromium, tantalum, silicon, or carbide alloys.

7. (Currently Amended) Pressure sensor with integrated structure according to claim 1:

further comprising a step on the inside of the seat, running along an edge of the seat,
~~wherein~~ in the vicinity of the upper surface of the support, ~~on the inside of the seat, a step is made that runs along the edge of the seat itself.~~

8. (Currently Amended) Pressure sensor with integrated structure according to claim 7 wherein
~~the die is assembled in such a way that the~~ upper edge of the die is in abutment with the step.

9. (Currently Amended) Pressure sensor with integrated structure according to claim ~~[[7]]~~ 8:

wherein the surface of the part of the step, that is in contact with the upper edge of the die, is less than the surface of the upper edge itself.

10. (Currently Amended) Pressure sensor with integrated structure according to claim 1:

further comprising a step on the inside of the seat, running along an edge of the seat,
~~wherein in the vicinity of the lower surface of the support, on the inside of the seat, a step is~~
~~made that runs along the edge of the seat itself.~~

11. (Currently Amended) Pressure sensor with integrated structure according to claim 10:

wherein the upper edge of the die is substantially ~~on the same plane as~~ coplanar with the upper surface of the support.

12. (Currently Amended) Pressure sensor with integrated structure according to claim 10:

wherein the ~~die is assembled in such a way that its~~ outer face of the die is in abutment with the step.

13. (New) Pressure sensor with integrated structure according to claim 1, wherein the die is integrated into the support.

14. (New) Pressure sensor with an integrated structure according to claim 1, wherein the support further comprises a lower surface, and wherein the pressure sensor further comprises an electronic

circuit built on the lower surface of the support, said electronic circuit being connected through bonding wires to the piezoresistors on the outer face of the die.

15. (New) Pressure sensor with an integrated structure according to claim 1, wherein the support further comprises a lower surface, and wherein the pressure sensor further comprises a silicone resin layer coated on the lower surface of the support, said layer being capable of following deformations of the die.

16. (New) Pressure sensor with an integrated structure according to claim 1, further comprising a container being suitable for putting the die in contact with the fluid the pressure of which is to be measured.